

REV	REF	DATE	DRAWN BY
1.00	Release	11.05.2017	KOS

Renesas Starter Kit for RX130-512KB CPU Board Schematics

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Note:

C : Capacitor
D : Diode
R : Fixed Resistor
RV : Potentiometer
L : Inductor
U : Integrated Circuit
X : Crystal, Oscillator
RES : Reset Switch
SW : Switch
LED : Light Emitting Diode
PWR : Power Jack
J : Connector, Jumper

* "DNF" marking means that component is not fitted by default.

Board Code:

RTK5051308C00000BE : RSKRX130-512KB MP Board

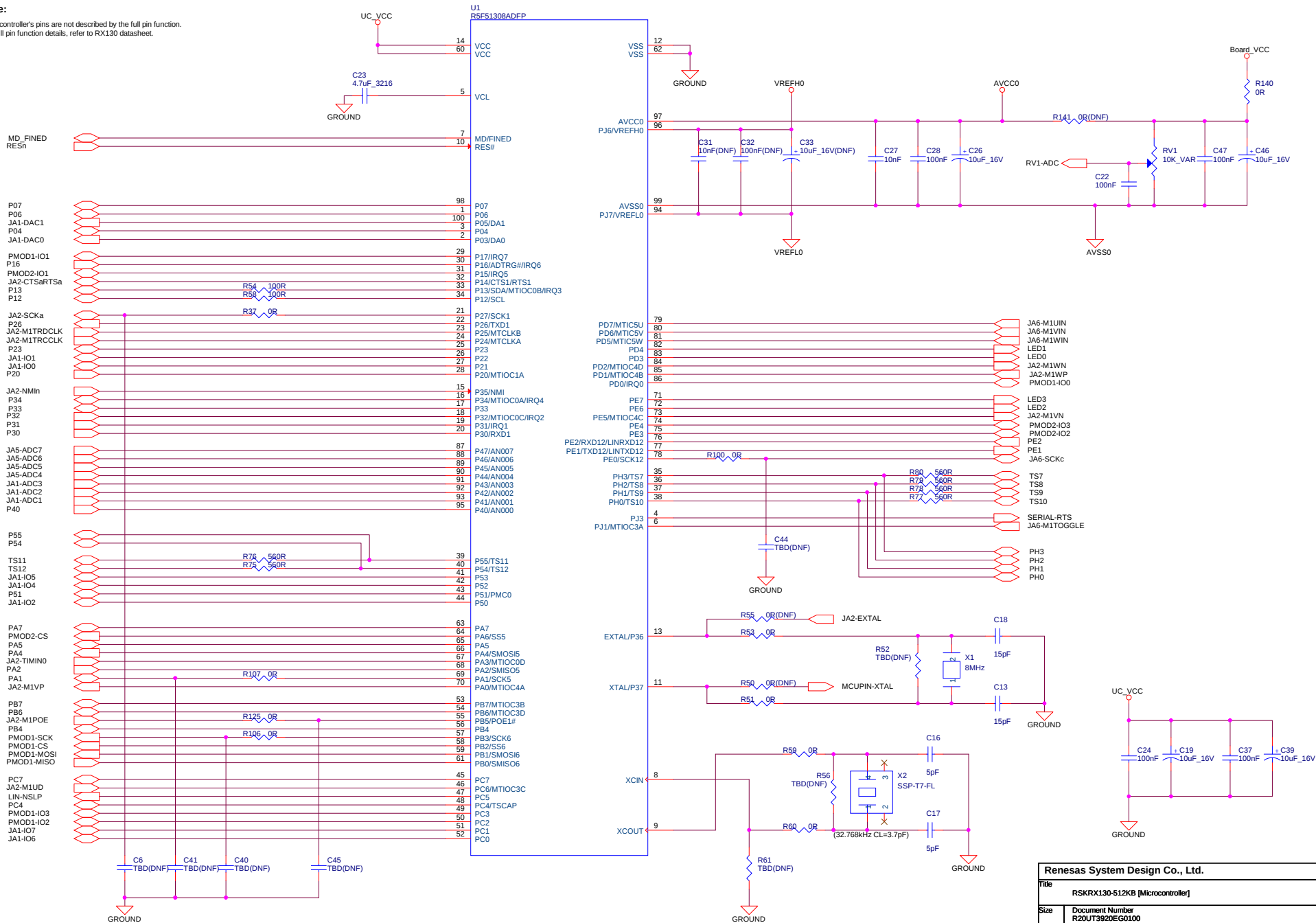
REEL Drawing No. D015292_04

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RX130-512KB Microcontroller

Note:

Microcontroller's pins are not described by the full pin function.
For full pin function details, refer to RX130 datasheet.



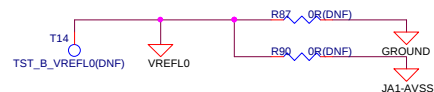
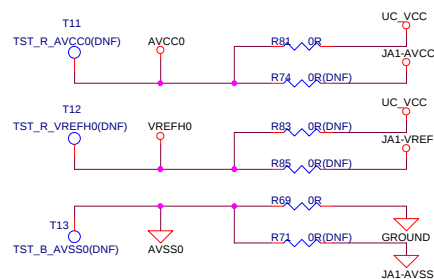
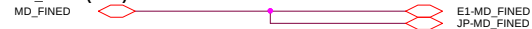
Renesas System Design Co., Ltd.			
Title			
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Size			
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1.00			
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MCU Pin Function Select

RES#(Pin10)



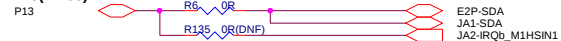
MD_FINED(Pin7)



P16(Pin30)



P13(Pin33)



P12(Pin34)



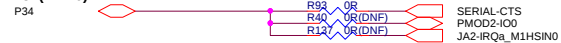
P26(Pin22)



P20(Pin28)



P34(Pin16)



P32(Pin18)



P31(Pin19)



P30(Pin20)



P40(Pin95)



P55(Pin39)



P54(Pin40)



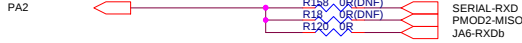
P51(Pin43)



PA4(Pin66)



PA2(Pin68)



PA1(Pin69)



PB7(Pin53)



PB6(Pin54)



PC4(Pin48)



PE2(Pin76)



PE1(Pin77)



PH3(Pin35)



PH2(Pin36)



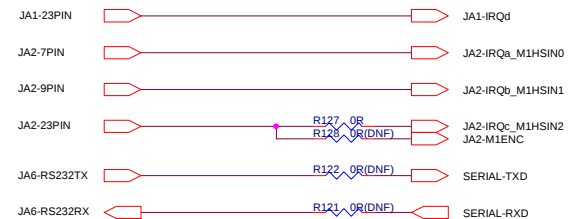
PH1(Pin37)



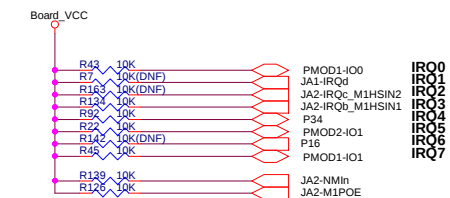
PH0(Pin38)



Application Header Function Select



Pull-up resistor



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Title RSKRX130-512KB [MCU Pin Function Select]

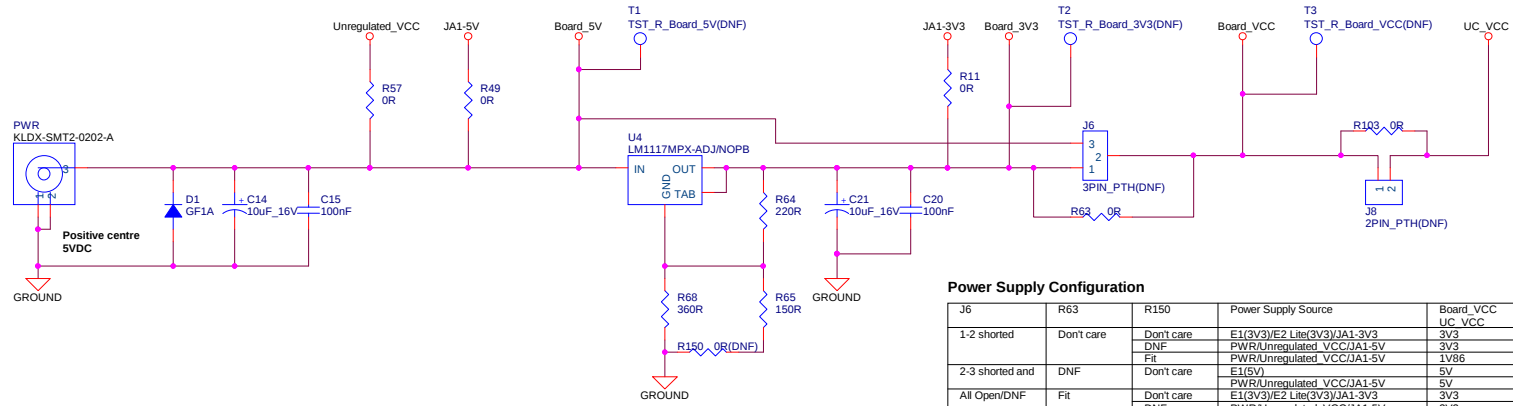
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Power Supply Unit

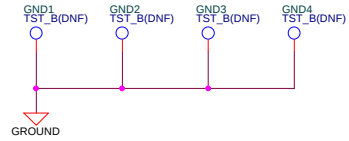


Power Supply Configuration

J6	R63	R150	Power Supply Source	Board_VCC UC_VCC	Unavailable Feature
1-2 shorted	Don't care	Don't care	E1(3V3)/E2 Lite(3V3)/JA1-3V3	3V3	LIN
DNF	Don't care	Don't care	PWR/Unregulated_VCC/JA1-5V	3V3	None
Fit	Don't care	Don't care	PWR/Unregulated_VCC/JA1-5V	1V86	Pmod, LED, LIN, RCR
2-3 shorted and	DNF	Don't care	E1(5V)	5V	Pmod
All Open/DNF	Fit	Don't care	PWR/Unregulated_VCC/JA1-5V	5V	Pmod
		Don't care	E1(3V3)/E2 Lite(3V3)/JA1-3V3	3V3	LIN
		DNF	PWR/Unregulated_VCC/JA1-5V	3V3	None
		Fit	PWR/Unregulated_VCC/JA1-5V	1V86	Pmod, LED, LIN, RCR

<- Default Settings

Ground Test Point



[illegible]

JP-MD_FINED

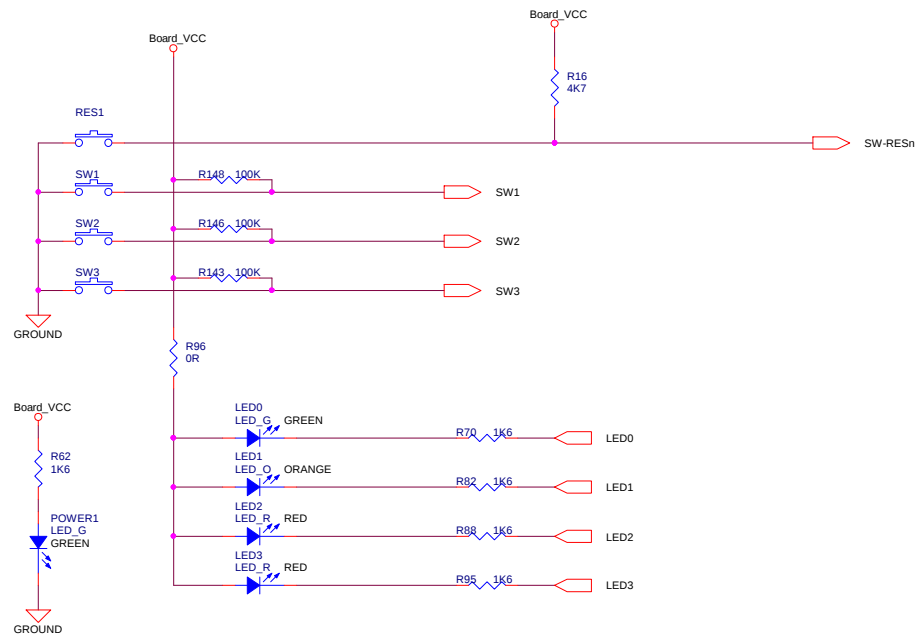
Board_VCC

R84
4K7

2
1
2PIN_PTH(DNF)

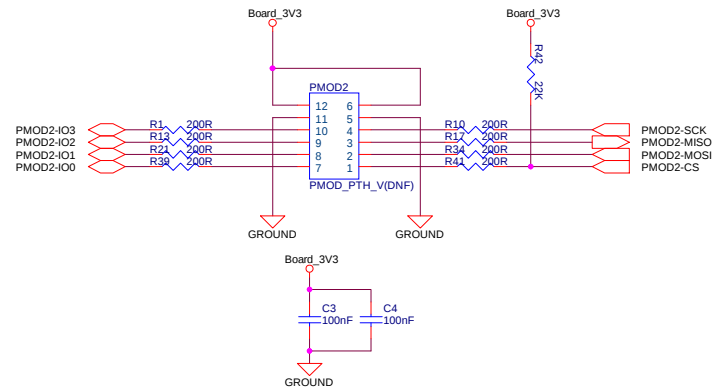
GROUND

Switches, LEDs, RESET

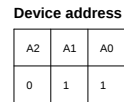


A vertical number line with points A, B, C, and D. Point A is at the bottom, followed by B, then C, and D at the top. An arrow points from B to C.

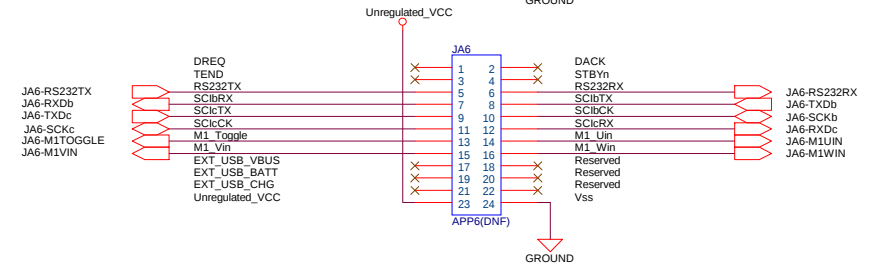
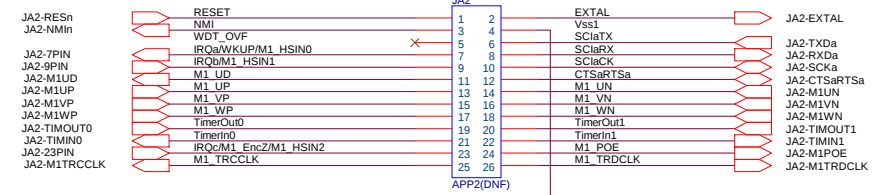
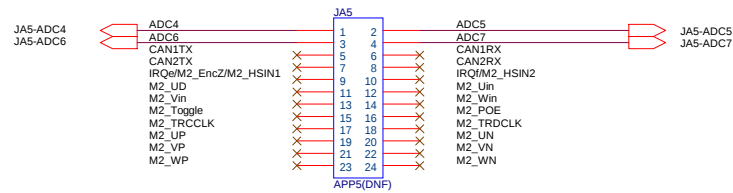
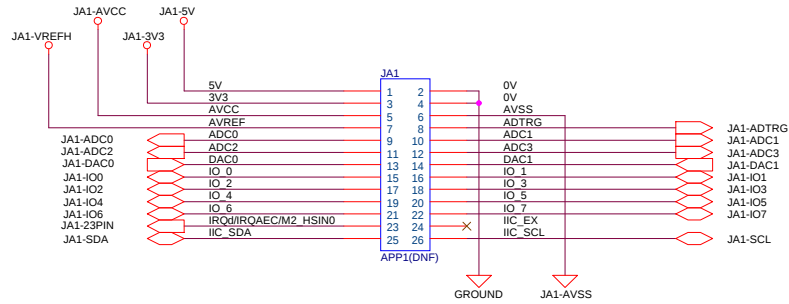
PMOD1: Angle type connector
PMOD2: Vertical type connector (spare)



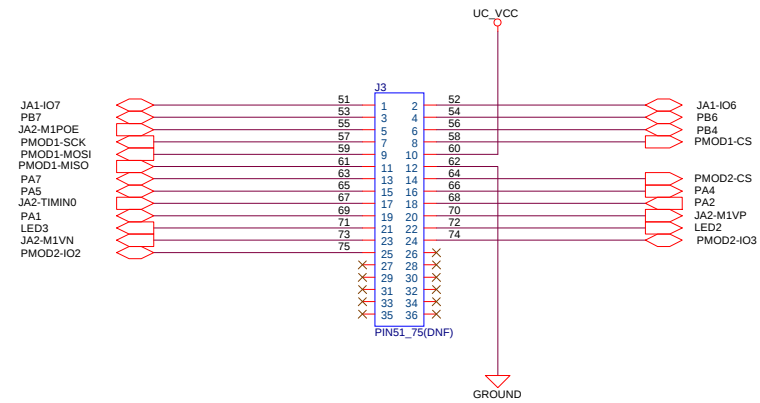
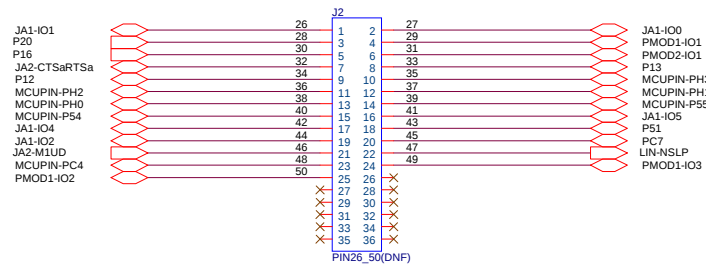
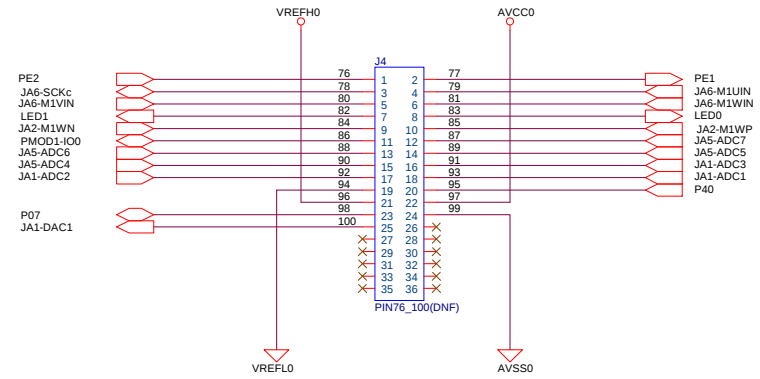
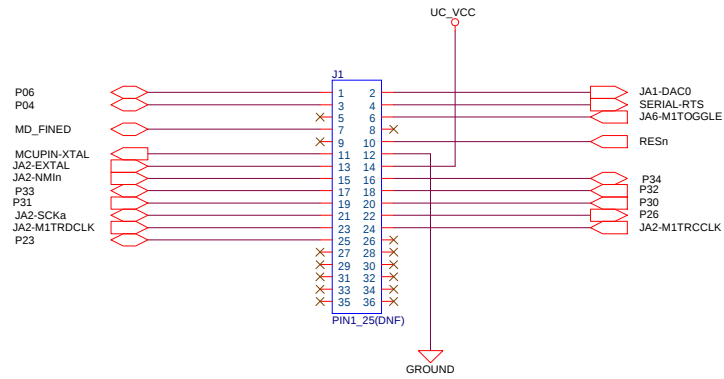
Warning:
NEVER FIT R12 and R20 simultaneously.



Application Headers



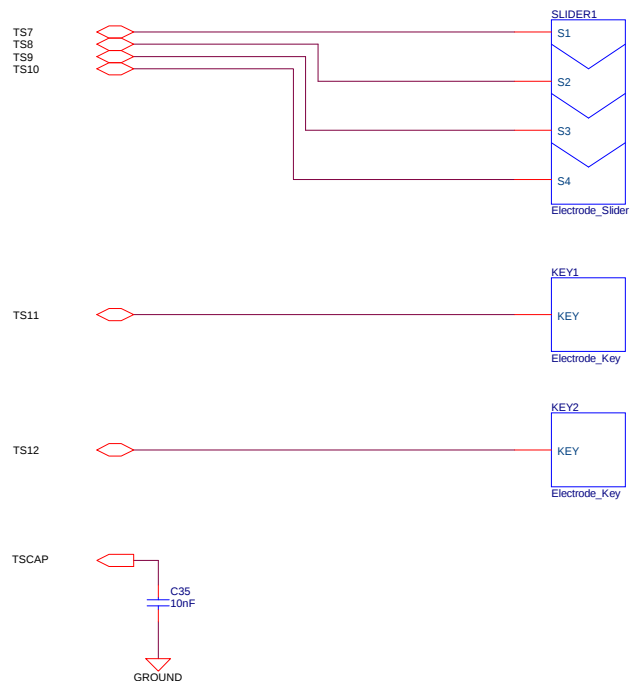
Microcontroller Pin Headers

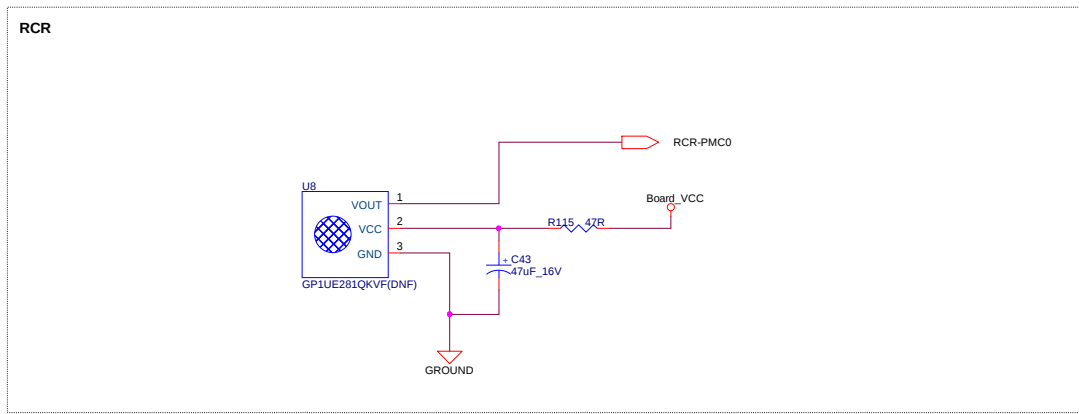
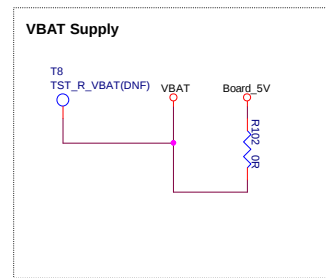
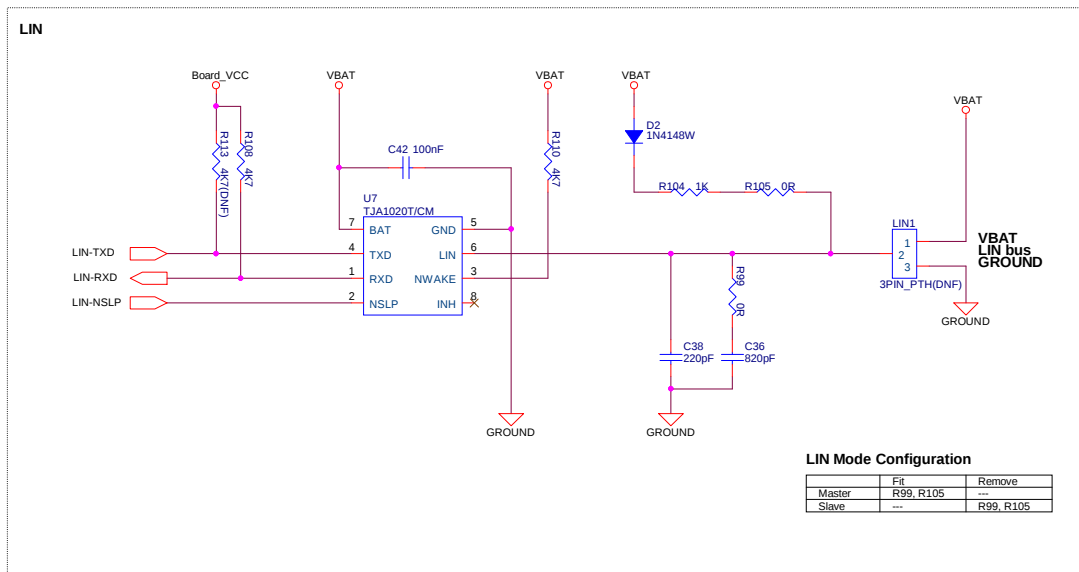


Touch Interface

Note:

Touch signals require careful route pattern.
For technical design information, please refer to application note 'CTSU Basis of Cap touch detection' (R30AN0218EJ).





Revision History

REV	DATE	PAGE	DESCRIPTION
1.00	11.05.2017	---	1st release edition.

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